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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,095	03/12/2004	Fay Chong JR.	SUNMP238	8103
32291	7590	05/26/2005	EXAMINER	
MARTINE PENILLA & GENCARELLA, LLP			BROUSSARD, COREY M	
710 LAKEWAY DRIVE			ART UNIT	
SUITE 200			PAPER NUMBER	
SUNNYVALE, CA 94085			2835	

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/800,095

Applicant(s)

CHONG, FAY

Examiner

Corey M. Broussard

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/18/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Component Array Bracket with Keyed Rail and Locking Lever.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-10 and 12-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Roesner (US Pub 2005/0047075). With respect to claim 1, Roesner teaches a front rail (82), a rear rail (80), and a bottom rail (30) to define a front, a rear, and a bottom boundary of the component positioning and securing bracket assembly (16), the front rail, the rear rail, and the bottom rail defining a structure into which is received the component (14); a top plate (42) for attaching to the component, the top plate including a keyed tail portion (70); a tail receptacle for receiving the keyed tail portion (90, 94); a

nose receptacle (receptacle defined by the slot 82) portion of the front rail for receiving a nose portion (end of 42 opposite 44) of the top plate; a component connector (18) to connect to a port of the component ([0013] line 6); and a lever (24) to provide leveraged motion, the leveraged motion effecting a connection of the port of the component and the component connector and securing the component in the component positioning and securing bracket ([0014] lines 3-7), wherein the component positioning and securing bracket assembly is in an array of a plurality of components ([0021] lines 14-18).

3. With respect to claim 2, Roesner teaches wherein the array of a plurality of components is one array of a plurality of arrays in an array chassis ([0021] lines 14-18, the drive loading system can be expanded to accommodate any quantity of drives).

4. With respect to claim 3, Roesner teaches wherein the component (14) is a computer component (see [0001] teaching the drive 14 of the invention is for a computer system).

5. With respect to claim 4, Roesner teaches wherein the computer component is a hard drive (see [0002] lines 2-3).

6. With respect to claim 5, Roesner teaches wherein the component (14) is a computer component (see [0001] teaching the drive 14 of the invention is for a computer system) and the plurality of arrays in the array chassis is a plurality of arrays of computer components in the array chassis of a computer system rack (see [0021] lines 14-18, the drive loading system can be expanded to accommodate any quantity of drives).

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7. With respect to claim 6, Roesner teaches wherein when the leveraged motion provides horizontal motion (28, see Fig. 1, 5) to secure the component in the component positioning and securing bracket assembly ([0014] lines 3-7) within the one array of a plurality of arrays in an array chassis ([0021] lines 14-18).

8. With respect to claim 7, Roesner teaches wherein the component connector (18) is attached to the front rail (82) and wherein the bottom rail (30) defines a lower boundary of the component positioning and securing bracket assembly (see Fig. 3) such that when the component is received in the structure defined by the front rail, the rear rail (80), and the bottom rail, the port of the component is aligned with the component connector (see [0018]).

9. With respect to claim 8 and 9, Roesner teaches wherein the component connector (18) provides power and data to the component (14, in order for the drive to operate, the connector must provide power and data).

10. With respect to claim 10, Roesner teaches a disk drive positioning and securing bracket assembly (16), comprising: a device surrounding component for holding a disk drive (12); a forward mounting post (82) attached to an array chassis; a rear mounting post (82) attached to the array chassis; and a lever (24) to provide leveraged movement to the disk drive, wherein the device surrounding component includes a device positioning key (70) and forward tabs (ends of 40, 42, see Fig. 2A, 2B), the device positioning key and forward tabs configured to be received in the rear mounting post and in the forward mounting post such that the device surrounding component having the disk drive therein is received in the rear mounting post and in the forward mounting

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post in a first direction of motion (26, see Fig. 1, 5), and the lever provides leveraged movement in a second direction of motion to secure the disk drive ([0014] lines 3-7).

11. With respect to claim 12, Roesner teaches wherein the array of a plurality of disk drive components (14) is disposed within an array chassis having a plurality of arrays of disk drive components (see [0021] lines 14-18, the drive loading system can be expanded to accommodate any quantity of drives).

12. With respect to claim 13, Roesner teaches wherein the rear mounting post includes a keyway (area of upper surface of 80 between 90 and wall opposite of 90) for receiving the device positioning key (70) in the first direction of motion (see Fig. 5).

13. With respect to claim 14, Roesner teaches wherein when the lever provides leveraged movement to secure the disk drive (14, [0014] lines 3-7), the forward tabs (ends of 40, 42, see Fig. 2A, 2B) are disposed within the forward mounting post and adjacent to the power and data connector (18, see Fig. 1, 5, the forward rail 82 must accommodate the forward tabs when the lever provides movement in order for the connectors to establish contact).

14. With respect to claim 15, Roesner teaches wherein the disk drive positioning and securing bracket assembly is constructed of materials including hard plastic and stainless steel alloy (it is known to use hard plastics and stainless steel alloys for construction materials in computer systems).

15. With respect to claim 16, Roesner teaches wherein the first direction (26) of motion is a vertical direction of motion and the second direction (28) of motion is a horizontal direction of motion (see Fig. 1, 5).

16. With respect to claim 17, Roesner teaches an array chassis of a computer system rack, a disk drive array positioning and securing system (10), comprising: a plurality of computer disk drives (14), the plurality of disk drives arranged in at least one linear array within the array chassis (16, see Fig. 1, 3, 5), each one of the plurality of disk drives including: a disk drive bracket (12) for positioning and securing the disk drive, and a power and data connector for receiving a power and data connection port of the disk drive (18), wherein the disk drive bracket for each one of the plurality of disk drives provides for movement of the disk drive in two directions of movement (26, 28, see Fig. 1, 5), and wherein each one of the plurality of disk drives is capable of being inserted into and removed from the linear array of disk drives independently of essentially every other one of the plurality of disk drives.

17. With respect to claim 18, Roesner teaches wherein the plurality of disk drives is arranged in more than one linear array (see [0021] lines 14-18, the drive loading system can be expanded to accommodate any quantity of drives).

18. With respect to claim 19, Roesner teaches wherein the disk drive bracket (16) for each one of the plurality of disk drives (14) comprises: a front rail (82), a rear rail (80), and a bottom rail (30) to define a front, a rear, and a bottom boundary of the disk drive bracket (12), the front rail, the rear rail, and the bottom rail defining a structure into which is received the disk drive in a first direction of movement (26); a top plate attached to the disk drive (42); a tail receptacle attached to the rear rail (90, 94); a nose receptacle attached to the front rail (receptacle defined by the slot 82); and a lever (24) to provide leveraged movement in a second direction of movement (28), the second

direction of movement resulting in the receiving of the power and data connection port of the disk drive by the power and data connector (18) and securing the disk drive in the at least one linear array ([0014] lines 3-7).

19. With respect to claim 20, Roesner teaches wherein the disk drive bracket (16) for each one of the plurality of disk drives (14) comprises: a disk drive surrounding component (12) for holding the disk drive; a forward mounting post (82) attached to the array chassis; a rear mounting post (80) attached to the array chassis; and a lever (24) to provide leveraged movement of the disk drive, wherein the disk drive surrounding component includes a device positioning key (70) and forward tabs (ends of 40, 42, see Fig. 2A, 2B), the device positioning key and forward tabs configured to be received in the rear mounting post and in the forward mounting post such that the disk drive surrounding component having the disk drive therein is received in the rear mounting post and in the forward mounting post in a first direction of movement (26), and the lever provides the leveraged movement in a second direction of movement (28) to secure the disk drive in the at least one linear array ([0014] lines 3-7).

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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21. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roesner (US Pub 2005/0047075) in view of Aoki et al. (PN 6,288,911). Roesner teaches the device as applied to claim 10 above, and a power and data connector (18) disposed within the forward mounting post (82); wherein the lever (24) provides leveraged movement in the second direction of motion (28) to secure the disk drive ([0014] lines 3-7). Roesner lacks specific teaching of a T-shaped slot. Aoki teaches of a T-slot (rail 3, see Fig. 1) wherein a device positioning key (31) moves through the T-slot (3) and a power and data port of the device mates with the power and data connector (17, see Fig. 6a-6c, col 4 lines 1-7). It would have been obvious to a person of ordinary skill in the art to combine the drive loading system of Roesner with the retention bracket of Aoki for the benefit of a rail system that offered better alignment of the drive with the drive bracket.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Salinas (US Pub 2003/0039100) demonstrating rack mounted disk drive systems. Jiang (PN 6,325,353) and Kurek, III (6,394,509) teaching the use of different materials used in drive brackets.

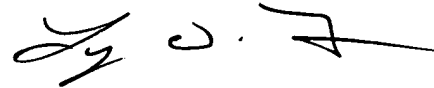
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corey M. Broussard whose telephone number is 571 272 2799. The examiner can normally be reached on 7:30-5 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 571 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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